RESTORATION INFORMATION MANAGEMENT SYSTEM
FORMERLY USED DEFENSE SITES (FUDS)
PROJECT FACT SHEET
REVISION 1: 4 OCTOBER 1994
TAG REVIEW DATE: 1 FEBRUARY 1995

1. SITE TABLE:

Site Name	Site No.	Location	Project No.	Cat.	INPR RAC	ASR RAC
Fort Custer	E05MI000600	Battle Creek and Augusta	E05MI000600	OE	NA	5
Fort Custer Recreation Area	E05MI001300	Battle Creek and Augusta	E05MI001303	OE/ CWM	1	1

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3. SITE DESCRIPTION: Fort Custer and Fort Custer Recreation Area are located approximately six miles west of the city of Battle Creek, Michigan in Kalamazoo and Calhoun Counties. The boundaries of the site were Climax Road (east), the Kalamazoo River (north and west), and Interstate 94 (south). The towns of Springfield and Augusta also border the old fort on the east and the northwest, respectively. **Fort Custer is that property consisting of what is now the V.A. Cemetery, including the Post Cemetery. Fort Custer Recreation Area incorporates the rest of the acreage as the training facility. These sites will be identified as one, Fort Custer.** Fort Custer has been in operation as a training facility since the early 1900's. A portion of the site is still under DOD operation as a National Guard Training area. The training facility had several ranges varying from small arms to hand

grenades to rocket.

4. SITE HISTORY: Military training at Camp Custer began in the summer of 1917. As part of the pre-war mobilization and the need for public works, the Work Projects Administration (WPA) revamped Camp Custer and employed over 2,500 people from Calhoun and Kalamazoo counties. The camp also added about 6,100 acres to its property, bringing its size to approximately 14,000 acres. On August 17, 1940, the Army designated Camp Custer a permanent installation and renamed it Fort Custer.

As the country moved closer to war, troop strength increased dramatically. During World War II, as in the previous war, Fort Custer provided recent draftees their basic training before sending them overseas. By the end of the war, Fort Custer had inducted 300,000 soldiers. Fort Custer also housed 5,000 German prisoners-of-war

After the war, military training at Fort Custer declined. During the Korean War, however, the fort trained 17,000 soldiers. In 1953, the Personnel Separation Center moved from Fort Custer to Fort Knox, Kentucky, and the fort went into inactive status. Fort Custer, as a U. S. Army installation, officially closed on June 14, 1968.

The only other DOD agency to use the fort in a significant manner was the U. S. Air Force. (The U. S. Navy Reserve and U. S. Marine Corps Reserve have also used portions of Fort Custer.) In 1959, the Air Force constructed the Fort Custer Air Force Station on 269.55 acres transferred from the Department of the Army. The base operated a Semi-Automatic Ground Environment (SAGE) system. This multi-million dollar network concentrated on detecting and repelling enemy air attacks. The Air Force operated the station until 1969.

During WWI, Camp Custer included an ordnance area consisting of six buildings in the northern portion of the site. A railroad spur provided access to the area, which was located at the intersection of Armstrong Road and the railroad tracks. The camp also contained an Ordnance Repair Shop.

When Camp Custer experienced its renovation prior to the Second World War, its ordnance area also received improvements. The storage facilities move to the northeastern portion of the fort. U. S. Army Corps of Engineer documents indicated that by January 1942 an ordnance shop (T-261), five magazines, and one ordnance warehouse existed at the fort. In addition, a report, dated December 29, 1941, revealed that one structure, originally designed as a stable, served as an ordnance storage facility.

After WWI, it is believed that the Fort Custer Air Force Station used the ordnance area. The site survey team noticed Air Force regulations painted on the doors of the storage facilities. The contents, according to the marking on the doors, had been high explosives and white phosphorous.

The archives search uncovered few references to the type of training conducted at Fort Custer at any time during its existence. An undated map (probably from World War II because of the

size of the fort, status of construction, and level of activity) provided some indication of the type of training at the base. It showed that the fort contained the following ranges:

a hand grenade course
transition course, rifle and carbine
pistol range
known distance ranges, rifle and carbine
landscape range
1000-inch rifle range
1000-inch machine gun range
transition course, carbine
sub-machine gun range
infiltration course
50-caliber anti-aircraft range
mock village
close combat course
rocket launcher, rifle, and grenade course
shotgun range
overhead artillery range

The archives search team discovered no documents referring to the shipment or storage of Chemical Warfare Material during the World War I period.

A letter, dated August 1922, from the 6th Corps Area Headquarters requested and received permission for a complete 4-inch Stokes mortar, a complete Livens Projector, and 1100 gas masks to remain in storage at Camp Custer for future use. In June 1924, Camp Custer personnel conducted an inventory of their Stokes mortar ammunition. The inquiry revealed that the camp possessed 132 rounds: 112 White Phosphorus (WP) and 18 Thermite. These rounds had been filled in 1918, and they had travelled to France and back during the war. Their cases showed rust from the weather, and ten of the WP rounds leaked opherite. The second indorsement of the correspondence recommended the destruction of all 132 rounds. The location or method of destruction remains unknown. In June 1928, the Chemical Warfare Service authorized the shipment of one pound of CN and 25 empty Stokes mortar shells to Camp Custer. Documentation from August 1925 and March 1929 showed that Ft. Custer possessed an excess of the smoke agent Titanium Tetrachloride (FM). Dry conditions during the large summer maneuvers of 1936 prohibited the use of smoke pots. Camp Custer stored 350 HC smoke pots until they were returned to the Chemical Depot at Edgewood Arsenal, Maryland.

In August 1941, Fort Custer completed building #3188, the Chemical Liquid Warehouse. In the same month, the fort processed a request for two chemical warfare magazines. The location of these buildings is unknown. The fort's projected storage requirements included:

48 DM candles
28 M1 detonating gas identification sets
2960 detonators

100 land mines
100 bursters
345 electric squibs
755 CN capsules
345 smoke pots
28 M1 instructional gas identification sets

In June 1941, Fort Custer received 10 M1 gas identification sets and 700 detonators, and the War Department authorized the shipment of 164 chemical land mines to the fort. The chemical officer at Fort Custer reported a shortage of demustardizing agents and apparatuses as well as other chemical warfare items in January 1942. Fort Custer received approval of its request for 150 DM candles in March 1942.

The archives search uncovered no documentation concerning the use of CWM in training. during WWI. Between the two wars, Chemical Warfare Reserve Officers laid down smoke screens using Stokes mortars during their summer training. They also fired tear gas and white phosphorus rifle and hand grenades, and they trained with Livens Projectors. They also received gas chamber training. During the course, they expended:

15 FM Stokes mortar shells
10 FM Livens Projector shells
50 HC smoke candles
10 WP rifle grenades
20 WP hand grenades
20 CW hand grenades
20 CW rifle grenades

On June 29, 1933, the 304th Chemical Regiment fired 42 4.2-inch mortar shells at Camp Custer. Five of these FS-filled shells malfunctioned. On July 19, 1935, five of eighteen FS filled 4.2-inch mortar shells fired failed to detonate properly. Soldiers never recovered the dud shells. Similarly, on or about August 18, 1936, soldiers fired forty-seven smoke filled mortar shells. Prior to the firing, an inspection revealed that three shells contained defective fuses. These shells were destroyed. Two more shells failed to explode properly. Soldiers later located and destroyed the duds. On August 20, 1936, a mechanized force laid down a smoke screen using 4.2-inch mortars. A subsequent inspection of the area uncovered thirteen duds which were destroyed in place. The archives search revealed no other specific information pertaining to chemical warfare training at Fort Custer during WWII.

In 1977, two youths, swimming in Eagle Lake in the Fort Custer Recreation Area, uncovered a softball-size piece of white phosphorus. An initial sweep of the area revealed five additional pieces of white phosphorus. EOD personnel from Fort Sheridan discovered two inert Stokes mortar rounds in the area. A Park official disclosed that 30-40 similar rounds had been found in the past five years. An intensive search of the lake by EOD divers from the U. S. Navy, using SCUBA gear and ordnance locators, uncovered 36 more rounds. Since the rounds were inert and concentrated in one area, EOD personnel concluded that the ordnance may had been

dumped in the lake.

5. PROJECT DESCRIPTION: Research disclosed that OEW and CWM activities did occur at Fort Custer. Based on research, eight areas of concern were identified on the FUDS properties associated with Fort Custer. Although no ordnance hazards were discovered during the site visit, it is likely these hazards exist in some areas of the former Fort Custer Recreation Area.

SITE: AREA A - WWII Ordnance Storage Complex
This area did store explosives at one time. Air Force markings are still visible on the doors of the magazines. It is unlikely there are any OEW or CWM hazards remaining in these magazines. However, the 1950 aerial photos did identify a trench of some sort. It is possible that ordnance was buried in this location.
SIZE: 10 FEET BY 4 FEET
ORDNANCE FOUND: None
SUSPECTED CONTAMINATION: high explosives and white phosphorous were what was painted on the igloo doors.

SITE: AREA B - WWI Ordnance Storage
It is not known what was stored at this location during WWI. The aerial photos did not uncover any activity related to OEW of CWM. It is unlikely any OEW hazards exist in this area.
SIZE:
ORDNANCE FOUND: None
SUSPECTED CONTAMINATION: None

SITE: AREA C - Hart Lake
The area around Harts Lake was part of several range fans. A sign labeled "Mine Danger" was discovered in 1992. This is documented in the EA for the Harts Lake Area. The lake is still used by the Navy for a Reserve Training Field, but the land around the lake is owned by the City of Battle Creek. No hazards have been reported in this area.
SIZE: Harts Lake is approximately 77 acres in size
ORDNANCE FOUND: None
SUSPECTED CONTAMINATION: mines

SITE: AREA D - Fuel Tank Jettison and Ordnance Area
This area has been fenced for approximately 15 years and is dense with trees and brush. Ordnance was found in the 1970's prior to the time it was fenced. It is highly likely that there are ordnance hazards (aerial rockets, small arms ammunition) and fuel tanks remaining. A grenade burn area was seen in this location during the site visit.
SIZE: 500 meters by 900 meters
ORDNANCE FOUND: None
SUSPECTED CONTAMINATION: rockets, grenades, white phosphorous

SITE: AREA E - Eagle Lake Impact Zones

The lake was searched by the Navy using SCUBA gear and ordnance locators in the 1970's and 36 stoke mortar rounds were uncovered. Prior to this search, approximately 40 rounds had been found, in addition to pieces of white phosphorous. Recommendations were made to the Fort to destroy 132 stoke mortar rounds. The location of this destruction is unknown, but is most likely in the lake area.
Two areas in the Eagle Lake vicinity have also been fenced for approximately 15 years. These areas were a hand grenade range and most likely a mortar range (no documents verify the latter). There haven't been any reports of found ordnance since the 1970's.
SIZE:
ORDNANCE FOUND: None
SUSPECTED CONTAMINATION: grenades and white phosphorous

SITE: AREA F - A Section of Ordnance Impact Zone
The probability that ordnance related hazards are in this area is low. There haven't been any reports and the portion of the range fan (Range J) is small. If there is ordnance, it would be due to Range K, .50-cal Anti-Aircraft Range, though none has been found outside the fenced area, AREA D.
SIZE:
ORDNANCE FOUND: None
SUSPECTED CONTAMINATION: small arms ammunition

SITE: AREA G - Post Cemetery Dump
The contents of this dump is unknown. During the site visit, boiler parts and other rusted items were seen. A film of oil covered the water. Since the researched documents only show buildings and the Post Cemetery in the area north of Dickman Road, it is not as likely ordnance was dumped here.
SIZE:
ORDNANCE FOUND: None
SUSPECTED CONTAMINATION: HTRW

SITE: AREA H - Ordnance Shops
The use of the Ordnance Shops is not known. The aerial photography did not reveal any
SIZE:
ORDNANCE FOUND: None
SUSPECTED CONTAMINATION: None

6. CURRENT STATUS: The Department of Defense still owns 7,569.70 acres of Fort Custer, which it leases to the Michigan State National Guard. The Fort Custer Reserve Forces Training Center trains national guard and reserve units, and local, state, and national law enforcement agencies. The city of Battle Creek acquired the majority of the cantonment area. Battle Creek Unlimited, the property's manager, has developed the area into an industrial park. The city also leases a portion of its property to the U. S. Navy Reserve as a training facility for a U. S. Marine Corps Engineering Company. The Department of Veteran's Affairs operates a hospital and a national cemetery on 625.27 acres. The Michigan Department of Natural Resources administers the 2,937.33 acre Fort Custer Recreation Area, providing

camping, hiking, biking, snowmobiling, and other outdoor activities. The Federal Emergency Management Agency maintains an antenna field on a 215.50 acre portion of the site.

7. STRATEGY: Recommendations are made for each area of concern.

AREA A - WWII Ordnance Storage Complex: It is recommended that a magnetometer be used at the location of the trench to determine if there is any ordnance buried. This trench is approximately 10 feet x 4 feet in size.

AREA B - WWI Ordnance Storage: No Further Action recommended.

AREA C - Harts Lake: The Navy has used this area for Reserve training since 1969. There haven't been any reports of ordnance findings. Only a sign, "Mine Danger" was found in the vicinity of Harts Lake. It is recommended that the lake is searched by individuals in SCUBA gear with ordnance detectors. If ordnance is found, then the area immediately around the lake is to be search with a magnetometer. The lake is approximately 77 acres in size.

AREA D - Fuel Tank Jettison and Ordnance Area: This fenced area, 500 meters by 900 meters, is very accessible to the public and is adjacent to hiking and biking trails and camping area. The Department of Natural Resources is wanting to clear the area of contamination to extend the recreation facilities and protect the public from going into a potentially dangerous environment. A letter stated that the area was to be cleared for surface use, but no documented clearance letter was found. This area is heavily wooded and is dense with brush. In order to determine if there are hazards, it is necessary to clear the area by burning or some other means. Once the area is cleared, it is recommended that is be fully searched. If no hazards are found, it is recommended the land be designated for surface use.

In the area of the grenade burn pit, it is recommended this area is excavated and cleared of any hazards. This area is approximately 3 feet in diameter.

AREA E - Eagle Lake Impact Zones: Since not all of the Stokes mortars were found, it is recommended Eagle Lake be investigated, as in the 1970's, with SCUBA gear and ordnance detecting apparatus. It has been almost twenty years since the last search, therefore it is possible that ordnance has surfaced. It is recommended also the area directly around the lake is searched with a magnetometer.

Again, like in AREA D, the two fenced areas are dense with trees and brush. The same recommendations apply within these fenced areas.

AREA F - A Section of Ordnance Impact Zone: No Further Action recommended.

AREA G - Post Cemetery Dump: Recommend this dump site be added to the geographical Corps District's HTW/HTRW site database. Also recommend this site be investigated.

AREA H - Ordnance Shops: No Further Action recommended.

8. ISSUES AND CONCERNS:

9. SCHEDULE SUMMARY: EE/CA

10. FUNDING/BUDGET SUMMARY: For Official Use Only

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Total Editing Time: 2 Minutes
Last Printed On: 02/03/00 3:45 PM
As of Last Complete Printing
Number of Pages: 8
Number of Words: 2,809
Number of Characters: 14,330